memorandum

DATE: March 27, 1986

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REPLY TO ATTNOF: Migratory Bird Field Coordinator, Memphis, TN

SUBJECT: 1985 Moist Soil Vegetative Transect Results

то: Refuge Manager, Hatchie NWR

Enclosed are two tables that summarize the results of Moist Soil Vegetative Transects for the summer of 1985.

Table 1 shows a summary of food value ratings for the seven moist soil unit transects. I have been subjectively using the criterion that, if a transect shows less than 50 percent of the plants are waterfowl foods, treatment would be desirable. Based upon this criterion, only unit #5 (Window-Northwest) would need to be treated.

Unit 3 (Hillville-East) also causes me some concern because almost 74 percent of the plant composition is an unknown grass and only 13.5 percent of the plants is rated as good. I would probably choose to treat this unit. Unit number 7 (Window-Northeast) shows 51.6 percent crabgrass with only 10.3 percent of the plants rated as good. Although crabgrass is rated as fair in food value, the volume of seeds produced is low. I would, therefore, suggest this unit also be treated.

Table 2 shows the percent composition for the various types of plants for each unit. All the plants you mailed to me were forwarded to a botonist for identification. Prior to sending off the plants, however, I made an initial judgement on the species or species group for each plant. Table 2 includes my initial judgements for most of the unknown plants. Since I have not heard from the botonist, I thought some decisions need to be made now for your consideration in developing this years habitat management program. Once I get a response from the botonist, I will update the tables.

If you have any questions, please advise.

cc: Frank Bowers

DHO/dj

"Team Up With Safety"

Table 1. Summary of 1985 Hatchie NWR Food Value Ratings for Moist Soil Vegetative Transects.

Moist Soil Unit*

Food Value	1	2	3	4	5	6	7
Good	26.1	50.9	13.5	32.3	24.7	19.2	10.3
Fair	35.7	1.6	75.2	23.6	23.2	41.1	70.6
None	36.1	16.7	7.0	43.4	42.1	36.3	18.2
Unknown	2.3	30.9	4.1	.5	9.8	3.0	.6
Total Good and Fair	61.8	52.5	88.7	55.9	47.9	60.3	80.9

*Unit number by name

- 1 Deep Woods
- 2 Hillville 3-37-18 West
- 3 Hillville 3-37-18 East
- 4 Windrow Southwest
- 5 Windrow Northwest
- 6 Windrow Southeast
- 7 Windrow Northeast

Table 2. Summary of 1985 Hatchie NWR Moist Soil Transect Plant Composition

Moist Soil Unit

Food Value/				 			
/Common Name	1	2	3	4	5	6	7
Good				-			
Nutsedge	9.9	3.6	.3		2.5	13.0	1.8
Fall Panic	4.8	39.1	11.5	10.7	1.6		.6
Barnyard Millet	11.4	7.2	1.7	6.7	19.8	3.1	1.8
Rush		1.0			.8		
Smartweed				14.9		3.1	5.1
Fair							
Spikerush	35.7	1.6	1.0	5.1	4.1	3.1	8.6
Beggarticks			.3				
Water Primrose				5.6	2.5	14.1	1.2
Crabgrass				18.5	11.6	5.2	51.6
Lovegrass						15.1	9.2
Sedges			4			3.6	
Unknown Grasses			73.9		5.0		
None			•				
Water Purslane	2.2						
Loosestrife	.4			9.7	11.6	3. i	6.7
Ammania	17.3			•••			
Trumpet creeper	.4		.3	3.6	.8	1.5	5.5
Cocklebur	12.9	3.3	3.4	5.6	3.3	27.6	1.8
Ludwigia	I hos a	.7	.3	2, 2	w, 5		1.8
_		12.4	***				1.0
Euphorbia		16.7		1.0			
Morning glory				8.7	.8		.6
Redroot				Ω. /	Q.		.0
Ragweed		.3					
Onion		.3	.3				
Garlic			.0			E	
Camphorweed				r .		.5	
Nettle				.5			
Bare Ground	29.0	0	2.7	8.7	25.6	3.6	0
Unknown	2.3	30.9	4.1	.5	9.8	3.0	.6
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	100.2	100.1	99.8	99.8	99.8	99.6	99.7

^{*}See table 1 for definition of MS unit numbers